THE VETERINARY RECORD

A Weekly Journal for the Profession.

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

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EDUCATION,

A few weeks ago there appeared in our pages the reprint of an article which was published in *The Rhodesian Agricultural Journal*, on "Immunity in its relation to diseases of stock." It was not 'scientific" in the academic sense, yet it gave the elementary truths of the subject in plain language, with sufficient detail to enable an intelligent man to grasp the main arguments, and with sufficient evidence to carry conviction of the beneficial results to be attained by its use. *It was published in an Agricultural Journal*, and it appeared to be admirably adapted for its purpose. It may be that in those newer lands, where the spaces are wide, the farmers are compelled to a closer attention to veterinary medicine than obtains in this country. It may be also that, as in most new countries, the men are the "pushers" from the home brood—are men of better intelligence and possibly of larger capital than obtains generally in Great Britain. Certainly the Governments of our Colonies and Dominions endeavour by these and other measures to bring home to the agriculturist the advantages to be gained by the use of the skilled advice provided for them.

Another example of the same policy is shown in the "Report on Punjab Veterinary College" (p 242). The abridged report which appeared in our pages is a sufficient outline of what is doing. It is instructive, suggestive, and wholly satisfactory as an evidence of the thorough nature of the work.

Here are a few sentences :—

"The increased facilities for teaching have led to very great improvement in the training of the students, and the standard of examination was very considerably higher than last year. I consider that the results are very good indeed."

"Never before has the demand for graduates been so great : and the supply is totally inadequate to meet it."

"More use might be made of the facilities which exist for the training of men in special subjects, such as camel diseases, and more men might be sent back occasionally for 'refresher' courses at the College."

A better understanding of these may be gained by reference to almost any of the C.V.D. reports which have appeared in our pages in the last few years, in which will be found repeatedly the statement—especially in respect of inoculation—that the prejudices and ignorance of the people has been the greatest hindrance, but that slowly the prejudice is giving way, and the ryots—there is a huge proportion of small cultivators in India—are now seeking veterinary help.

Our British agricultural journals—especially those of the "Trade" type—are never tired of uttering gibes at the Board of Agriculture; ready always to condemn rather than to assist; forgetting—or ignoring—that the Board, with its ever-changing figure-head, has its own difficulties to contend with. And as an almost inevitable consequence, the veterinary profession is similarly discounted. Up to a comparatively recent date one leading Scottish agricultural journal never missed an opportunity of flouting it. The only sympathetic note that we remember to have seen was in *The Farmers' Gazette*, Dublin, a few weeks since, in which the Editor pointed out what an asset the services of the veterinary surgeon is to the stock-owner if prompt and judicious use be made of them, and lamenting that Ireland is not better supplied with practitioners.

Immediately following the Report on the Punjab Veterinary College in our pages is a short note from a local paper stating that at a meeting of the Essex Executive Committee, under the Diseases of Animals Acts, the subject of Epizootic Abortion was discussed. A member stated that the Essex Farmers' Union had taken the matter up: and in the result it was decided to take no action.

Evidently there is difficulty with the "natives" in other places than British India.

If there is one animal disease more than another which has been met in recent years with a scientific weapon it is Epizootic Abortion in cows. It is proved up to the hilt. Two well-known practitioners, Mr. G. P. Male, of Reading, and Mr. R. J. Verney, of Oxford, were pioneers in the field use of the anti-abortion vaccine, and their results were good enough for any practising veterinary surgeon to go upon, Yet in the "milk and meat" county of Essex "it was decided to take no action," The Farmers' Union will move in the matter. *They* know what a loss the disease inflicts in their herds.

It almost seems, too, that the veterinary surgeons are "taking it lying down." It is true that the work of municipal and county veterinary officers is little heard of in public; but are the general practitioners doing as much as they might to popularise the use of anti-abortion vaccine? Enough has been published to enable them to take up a definite position on the question, but when one sees the farmers in Essex asking for vaccine treatment, and a similar body in Scotland attacking the problem of Louping-ill, one asks where is the initiative of the profession? Do they need a University degree to enable them to appreciate the position?

CURIOUS CASE IN A FOWL.

By HENRY TAYLOR, F.R.C.V.S., Hayward's Heath.

The subject was a young cockerel which had been kept for two days by itself in a fowl house. The following were the symptoms presented;—The comb was of a good colour and was bleeding at several points, not as if he had been fighting, but as ecchymosed spots at which the blood seemed to ooze through the unbroken skin. At the anterior end of the comb there was a big scab formed by several small spots coalescing; the skin under the wings was dark; the bird was off feed and rather weak, and had diarrhœa. He died the same day.

Post-mortem. The muscles of the breast were quite dark coloured, almost like a beefsteak; the skin covering the body was also dark and had its blood vessels injected. The intestines were inflamed. and those near the anterior end of the alimentary tract contained an extraordinary quantity of bile. The liver was very fatty. On exposing the contents of the gizzard by an incision down the middle, there was given off what I first thought was steam, as the day was rather cold, but which on closer inspection were found to be fumes. On smelling these the mystery was at once cleared up; the odour was exactly like that of a wet box of matches, and the bird must, therefore, have died from phosphorus poisoning.

As that element is *the* constituent of rat poison, and the active ingredient, I enquired if any had been put down. It transpired that some Chase's Beetle Killer, which is a phosphorus compound, had been put down to poison rats on the Tuesday evening. The bird was shut up on Wednesday evening, and all the pieces of poison are said to have been accounted for, so exactly how he came to partake of any of the stuff remains a mystery.

Remarks. Phosphorus paste is said to be made from one part of phosphorus to sixty parts each of flour and water, and the toxic dose of phosphorus for the fowl is given as ·025 grains (about 1/3 of a grain). The symptoms of poisoning in poultry are said to be "weakness, intense thirst, diarrhœa and choreic movements in walking."

Royal College of Veterinary Surgeons.

EXAMINATIONS IN DUBLIN.

At a meeting of the Board of Examiners, held in Dublin on December 8th, 1916, for the Written, and on December 12th to 19th for the Oral and Practical Examinations, the following gentlemen passed their Final Examination:—

Mr. R. Brosnan	Mr. J. Leigh
M. Farrelly	W. Reidy

The following passed their Third Examination:

Mr. W. Forde	Mr. A. J. Kelly
A. H. Morris	G. P. Kennedy *
W. E. Barry	I. McCauley
M. Donohoe *	C. E. McCrea
W. F. Fennelly	J. P. Morris
W. Henigan *	

The following passed their Second Examination

Mr. D. Brophy	Mr. J. J. O'Donovan *
T. F. Moran	L. R. Swifte
A. J. Devine	G. West
M. A. O'Connor	W. White *

The following passed their First Examination:

Mr. E. A. J. McNamara	Mr. J. Paterson
J. M. Morris	R. J. Nolan *
T. O'Carroll	

EXAMINATIONS IN EDINBURGH.

The following passed their Final Examination:

Mr. N. Bisset	Mr. J. Robertson
E. C. Nelson	

The following passed his Third Examination:
Mr. A. N. Metcalf

The following passed his Second Examination.
Mr. D. Buchanan

GLASGOW COLLEGE.

The following passed his Final Examination;
Mr. D. E. Orr.

The following passed their First Examination

Mr. J. Downie	Mr. A. Houston

EXAMINATIONS IN LIVERPOOL.

The following passed their Final Examination;

Mr. W. A. Berry	Mr. E. W. Hughes

The following passed their First Examination:

Mr. J. K. G. Sisson	Mr. H. Warrington *

EXAMINATIONS IN LONDON.

The following passed their Final Examination;

Mr. E. C. Bowes	Mr. S. R. Rippon
C. K. Calder	G. F. Watkins
W. A. Dickinson	P. F. Woodland
R. B. Nelder	

The following passed their Third Examination:

Mr. T. Le Q. Blampied *	Mr. H. H. Leach
C. H. Conder	S. H. Pettifer *
H. Cooper *	K. S. Simpson

The following passed their Second Examination:

Mr. I. R. R. Coleman	Mr. T. R. Thomas
L. N. Devenish	H. Thornton *
C. H. P. King	

The following passed his First Examination:
Mr. H. Jerrom *

Marked thus * passed with Second Class Honours.

SUBSCRIPTIONS TO R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons begs to acknowledge the receipt of the following subscriptions:—

S. Chambers, Kirkheaton, Huddersf'd	£1	1	0
H. S. Cockburn, Capt. A.V.C.	1	1	0
B. Gorton, Ilford (1917)	1	1	0
M. C. Tailby, Birmingham	1	1	0
Previously acknowledged	837	13	6
	£841	17	6

THE CENTRAL VETERINARY SOCIETY.

[NATIONAL V.M.A. SOUTHERN BRANCH.]

An ordinary general meeting was held on Thursday, 7th December, at 10 Red Lion Square, London, W.C., the chair was occupied by the President, Nicholson Almond, Esq., and the following Fellows signed the attendance book:—Prof. G. H. Wooldridge; Messrs. B. S. Cockerton, A. E. Gostling, G. S. Heatley, W. S. King, G. H. Livesey, J. W. McIntosh, H. J. Parkin, F. G. Samson, and Hugh A. MacCormack, Hon. Sec.

Minutes. It was proposed by Mr. Samson, seconded by Mr. McIntosh, that the minutes of the previous meeting be taken as read. To this members assented unanimously.

Correspondence. The SECRETARY announced that the following Fellows had written regretting their inability to attend:—Messrs. P. C. Woolston, J. B. Buxton, E. Lionel Stroud, and J. T. Angwin.

A letter from Mr. James A. Gosling, to the effect that, since it was impossible for him to attend the meetings, he desired his resignation to be placed in the hands of the President. The Secretary had meanwhile taken upon himself to write to Mr. Gosling, urging him to reconsider his decision. Mr. Gosling had replied that for reasons already stated it was impracticable for him to continue his membership.

On the motion of Mr. McIntosh, seconded by Mr. Samson, the resignation of Mr. Gosling was accepted with regret.

The Secretary announced the receipt of *Bulletin*, No. 60, of the Agricultural Research Institute, Pusa.

On the motion of Mr. McIntosh, the Secretary was requested to acknowledge, with thanks, the receipt of this publication.

"IS IT MORE PROFITABLE TO GROW GRAIN FOR THE PUBLIC CONSUMPTION OR FOR THE FEEDING OF STOCK?"

Mr. G. H. LIVESEY opened the discussion. He was afraid that members would regard it as an impertinence on his part that he should bring forward a subject about which he knew absolutely nothing. The matter had arisen from a question he had asked at the last meeting, the discussion of which had been adjourned to the present one. Personally, he knew nothing of whether it was more profitable for a farmer to grow grain for feeding his stock or to grow wheat and oats for human consumption. The subject was of great importance at the present time, and he desired to explain how the question had arisen in his mind. During the last year he had been working on a recruiting staff, and since the Military Tribunal had been set up he had held the post of Military Representative, and as such, had come into contact with a very large number of farmers, and people engaged in all sorts of industries. During that time he had learnt many things that he could not have learnt in any other way. He had learned the ins and outs of people's businesses—how these were carried on, and with what expense and difficulties—in a way he would not have believed possible.

A very important matter had lately been carried through—the census of agricultural holdings of five or six acres and upwards. These agricultural census papers, for the whole of the district, had to come through his hands, and they had been examined and criticised. All the data of the census papers had been carefully considered by committees composed—in his district—mainly of farmers of the highest standing, and the requirements of the countryside had been stated and discussed; the amount of grain—wheat, oats, etc., that had been laid down had been considered, together with the amount of labour available for the working of the farms, the amount taken, and consequently the amount left. Thus, in going through all these papers he had learnt what the difficulties of the farmer were, and had, accordingly, a certain amount of information to put before the meeting.

On his tribunal was an agricultural representative, a man of mark in his district, a large west country farmer, farming between 2000 and 3000 acres. This man had been farming all his life, and was held in high esteem; he was no fool, and knew what he was talking about. Of course, the farmer was an opponent of the military representative, and when the latter wanted men, the farmer opposed, and tried to retain them on the land.

Members would recall that in September last there had been an agitation, practically throughout the country, in regard to the price of milk. The "sixpenny" milk was causing a great deal of unrest, especially in the towns. People had come to him and suggested that, as he was on the local tribunal, he should stir up the farmers, who, they contended, were making a heavy profit, and it was not right for them to make such profit and keep the men under an "agricultural umbrella." They urged, moreover, that the farmers must be making great profit out of their grain, must be piling up fortunes and keeping men on the land, while the public had to pay 10d., 10½d., and 11d. for a quartern loaf of bread. They did not regard this as fair, and considered much of the fault to lie with the tribunals, and particularly with the military representative. He Mr. Livesey was very friendly with his agricultural *confrère*, and had been accustomed to twit him about the matter, showing him any particularly interesting anonymous letter which may have come to hand. Upon one occasion he had written a somewhat caustic letter—in a quite friendly way—which his *confrère* had taken seriously, and had replied in defence of farming. Mr. Livesey particularly desired to read this letter to members, because he regarded it as a very good letter, opening up a subject worth consideration and discussion; it put the whole thing in a nutshell.

In substance, it ran as follows:—

He had read Mr. Livesey's letter with interest, and contended that he, the farmer, should know something of the situation in Lincolnshire, Essex, Warwickshire and Northampton, his business having carried him into those counties during the year. He could assure Mr. Livesey that the situation varied greatly. Some neighbourhoods had lost a lot of men, others few, but on the whole the counties varied little—with the exception that cows had been given up rather more generally in several of the counties. The writer considered that Essex had suffered from want of men as much as any county. Thousands of acres were empty for want of labour, a remark which also applied to Wiltshire, in which county the writer knew of a large and good farm, 1800 acres in extent, carrying 80 cows and a flock of 700 or 800 ewes with their offspring, which had been given up for lack of a tenant; no tenant could be found, and no work was done on the farm. This could not be to the interest of a country at war, with food supplies coming overseas. In many ways the farmer was placed in a dilemma. He received urgent advice from Whitehall to do all possible to get foods produced, and at the same time was abused for not letting his men enlist. If the farmer were told that food-growing did not matter, but that men should enlist, he would have something definite to go upon. Many people, had a false idea of how country people had enlisted. Taking his own parish, had the whole of England enlisted in the same proportion, the army would have numbered close upon if not quite 9,000,000 men.

With regard to prices, he would first take milk. The winter and summer prices were, in his case, 1s. 3½d. per gallon. For every gallon of milk the cost in artificial food—at the present price of cake—was 7d., and in the summer 4½d. Last year his losses in cows averaged 10 per cent, and cows had a considerable value. The dairyman received received 6d. a quart or 2s. per gallon,

for which he paid an average of 1s. 3½d. yet the farmer got the blame for dear milk. If he consulted his own pocket entirely, he would with present high prices of food stuffs and the shortage of labour, give up milk. He had given up to the extent of 60 gallons a day, and a neighbour of his who, in the pre-war period made 100 gallons, had sold the whole of his herd.

Coming to the question of wheat, he had recently sold some at 65s. a quarter approximately £14 10 0 per ton, and had to purchase cake at £15 a ton, while cartage home of the cake cost another 4s. 6d. He was therefore giving 19s. more per ton for his cow food than he received per ton for his wheat for human consumption. If used half and half—as cow food, wheat was about equal in value to cake. As to the price of oats, he had sold an A1 sample at 37s. 6d. per quarter, or £12 10 0 per ton, and purchased food stuff in substitution for equal prices. The high price of food stuffs was therefore hitting the farmers hard. Last year he had paid £4000 for feeding stuffs and received £2400 for grain sold. Seeing that the rise in price of food stuff had brought the price per ton equal to the high price obtained for grain, it was difficult to see where the gain came in on the exchange. He admitted that people on good land were more favourably placed, but the figures submitted were his actual figures.

Again, the price of manures had gone up from 45s. 6d. per ton to 87s. 6d. The manure he purchased was a by-product of the steel trade, and was costing the manufacturer very little (if anything) more to produce than before the war, owing to the immense quantities of steel used in the country. No voice was lifted to protest.

The only men, who had a favourable position during the war were those who had previously farmed highly and were producing on their reserve fertility. Such men were to be commended not condemned. He allowed that on some farms there were too many men of military age, but such farms were in situations suitable for workmen to live, and would always have men, so long as there were outlying farms which had men who could move. But what gain was that to the nation. ? He felt as great an interest as anyone in inreasing man power, but left the proper authorities to judge between food production and the needs of the army.

In no country had the agricultural community been so neglected in the past as in England, Scotland, and Wales. When war broke out the authorities woke up to the usefulness of the agricultural population. That population at the outbreak of the war had been at a very low ebb, and it had been impossible to make such drafts as would otherwise have been practicable. It had been assumed in England that there was no community which could expend money with so little benefit to the nation as the rural community, whereas the opposite was the case in the actual economy of a nation's life. He had been closely connected with both town and country for many years, and knew the facts to be as he stated. Thirty years ago the position was so acute that one third of the farms in England, in the Midlands and in the East and South East counties, were on the market, and to-day more than half the land in those counties was farmed by men who had migrated from the West and North of England and from Scotland.

Mr. LIVESEY stated that he had written to the farmer in question, and had asked him for figures in relation to the feeding of cattle, particularly the half-and-half feeding which had been mentioned. To this enquiry he had received the following answer :—

The writer commenced by saying that he had had some experience in feeding, both with maize and wheat. He had kept his horses on maize for eight years, the maize had been crushed between rollers. His horses had never been in better health nor more equal to their work. But the feeding required careful carters, for maize was not in itself a balanced food. He preferred a mixture of half maize and half grain, or maize, grain and bran in equal parts. Wheat could be fed economically to cattle, but sparingly to horses ; the latter were delicate animals, and the wheat should always be crushed—not ground, for if ground, it was apt to "ball" in the stomach. Crushing keeps the bran on the outside, and does away with the danger of "balling." A good test was to put crushed and ground wheat in a bucket, and pour water over them. It would be found that, in a few minutes, the crushed wheat would become wet, whereas ground wheat would not mix with the water unless thoroughly stirred, and even then had a tendency to become lumpy. In the case of food high in albumens, wheat acted as a reducer of the albumens, and so became very valuable. Composition of animal cake was : Albumen 40, Oil 8, Carbo-hydrates 35, while that of wheat was :

Albumen 13·07, Oil 1·65, Carbo-hydrates 68.

He considered the following an economical standard for cattle : Albumen 20, Oil 10, Carbo-hydrates 40 to 45

Wheat feeding assists greatly by reducing albumens to an economic point, and, as cattle food, become more valuable than cake food alone. If, of course, maize, barley, or other cereals rich in carbohydrates were available at a less price per feeding unit than wheat it was not economical to use wheat ; but per unit of feeding properties it is probably of more value than either maize or barley—in a mixture. It is, however, poor stuff for feeding cattle or horses by itself, unless soaked or caked, or even sprouted.

Coming to the matter of prices of wheat and cakes, he submitted his sales and purchases for the second week of October this year. If enquiry were made of merchants dealing both with wheat and feeding stuffs, such as Stricklands, it would be found that wheat was often below the price per ton of linseed or other highly concentrated foods, such as ground nut-cakes, etc. Stricklands had purchased wheat from him in October at 66s. per qr., at 63 lb. per bushel, or £14 14s. per ton. On the same date he had purchased linseed cake at £15 10s. per ton, which had to be carted home at 4s. per ton, while the cartage of the wheat to the station cost 3s. 6d. per ton. The transaction left him in the following position :—wheat, £14 11s. 6d. ; linseed cake, £14 14s. per ton. Again, under contract with Stricklands, he had purchased linseed cake at £13 5s. per ton, which, with 4s. cartage, became £13 9s. He sold wheat at 57s. per quarter, or £12 14s. 4d. per ton, less cartage at 3s. 6d., leaving £12 10s. 10d. per ton. On March 10th last he purchased nut-cake from Stricklands at £12 2s. 6d., selling wheat on the 19th April (the nearest date of sale) at 50s. per quarter, or £10 18s. per ton. . . .

In conclusion, the writer stated that he was more than anxious that farmers should stand in true relation to economy and the country's needs. He had no brief for the agricultural community, asking merely for fair and even justice, and that that community should be put on an absolutely commercial footing, so that the rural population might increase and become a better backing for the defence of the nation.

Mr. LIVESEY, in reply to the President's enquiry as to stock, believed that the writer of the letter kept about 76 cattle, had now between 80 and 90 milking cows, and about 200 stall-fed stock, with 2000 to 3000 sheep in flocks. There were 59 horses, and eight teams were worked.

It seemed to him that the letter was a remarkable one, and showed that the writer had really made a study of the matter. No doubt he was a sucecssful farmer and was putting money in his pocket. But, in his own language, he was one of the men to be commended rather than condemned, because he was, un-

doubtedly, living on the reserve fertility of his land; he had worked his farm uncommonly well in past years, and was now reaping the benefit. He (Mr. Livesey) had endeavoured to bring this farmer to the meeting, but, unfortunately, he was too much occupied: had he been present it would have been interesting to hear him explain why it would pay him to keep all that he grew on his land for the raising of stock. The point was so new to the speaker that he thought the Veterinary Society would like to consider it, and certainly it would give rise to many points for discussion.

The PRESIDENT remarked that the opener of the debate had not indicated his own view as to whether or not it was more profitable to the farmer to grow grain for his own stock or for the community. As it appeared to him, two very important and very distinct views were involved: one, the welfare of the farmer himself, and the other, the welfare of the nation as a whole. [Mr. Livesey observed that he had purposely avoided expressing any personal opinion.]

Continuing, the President said that it was not usual for the Chairman to open a debate, but as members seemed hesitant, he would proceed. He had no doubt whatever as to the answer to the question on the agenda so far as the community was concerned. There was plenty of experimental evidence to show how much food stuff was necessary to produce so much beef, mutton, or pork, and it certainly took a great deal more nutriment to produce a pound of flesh of any kind than was, in comparison, sufficient to support mankind. Grain sufficient to produce a hundredweight of beef would provide nourishment for humanity many times in excess of the nourishment afforded by the hundredweight of beef. From the farmer's point of view it was less easy to speak positively, because the prices of food and of stock were variable. Alluding to an observation made by the farmer, the speaker considered it pertinent to enquire why cows had been given up? [Mr. Livesey: Through lack of labour.] In some cases it may be due to lack of labour, but in many instances the speaker believed it was due to ths present high price of beef; that was frequently the governing factor. Many cowkeepers had been feeding and selling their cows for beef, especially the old cows, and had obtained high prices for them; in fact, as members would know, cows were fetching as much as £40 to £50, the price of which before the war would have been £20 or £22, or in the case of a dry cow £14 to £15. He could not say exactly what was the present price of fat cattle, but it was certain that many were sold at £30, £35 or £40, which, in ordinary circumstances, would not have fetched two-thirds of these amounts.

On the question of the land stated to be out of cultivation, or going out of cultivation for want of labour, he had recently seen an announcement that the Government has taken over unused land, and they had probably done this with a view of using it profitably. With regard to the "sixpenny" milk, Mr. Livesey had given the figure of 15½d. a gallon, and the speaker considered that the milkman had a great deal to do for the 2s. a gallon he received; distribution was very costly. [Mr. Livesey gave the cost as 7d. a gallon.] That, the President continued, left very little profit to the dairyman. Having regard to the high price of food and the tremendous price of cows, owing to their scarcity, the price of 6d. a quart was not excessive. The statement had been read that the farmer was giving 19s. more for food than he received for wheat. Regard must be had, in this connection, to the population or stock of the farm on which there appeared to be 60 head of cattle, 60 cows, besides young stock, and 800 to 1000 sheep. The food purchased, therefore, needs to be of a highly nutritive character and would be proportionately dear. [Mr. Livesey: The cake is now as high as £17 15s. per ton.] The statement had further been made that the farmer had paid £4000 for food stuffs and received only £2400 for wheat. That, however, did not teach anything, as the profit would come from the cows and sheep, and not from the grain. In Essex this year lambs had been sold as high as £4 and £4 5s. per lamb, or more—the highest prices ever realised for black-faced Suffolk lambs by auction in the open market. That would pay for a good deal of wheat. Therefore, considering the stock which the writer of the letter had on the farm, the speaker did not regard the difference between the two sums mentioned as counting for much. It was, moreover, quite possible that the farmer kept a large portion of his wheat—in view of advancing prices, and nothing is said of the barley, oats, peas, and beans; but, at any rate, he must have made a large profit out of his stock, and it was not surprising that he paid more for the highly nutritious food needful for such a stock than he received for his wheat only.

The question had been raised, at the last meeting, as to whether wheat was suitable for feeding horses, and had been referred to in the letter which had been read. At the present time it would be madness to feed horses with wheat, but in the eighties, when wheat was as low as 18s. to 23s. a quarter, and was sold for years considerably under 40s. a quarter, it might have been profitable to do so. In fact, in the neighbourhood in which he was then living large quantities of wheat were used for horse feeding. The seasons then were very wet, and much of the wheat was damaged. Fellows would, however, know that if a horse, unused to wheat, broke into a barn, or got at wheat in any other way, and ate anything like half-a-peck, the wheat would be certain to induce disease, particularly laminitis. It was his invariable experience that when horses filled their stomachs with wheat acute laminitis supervened within 24 to 48 hours. He could not say why this was so—whether there was any product of fermentation which set up this metastatic inflammation of the foot.

Mr. Almond then gave figures bearing on the feeding question. Quoting from Laws and Gilbert, with whom members would be familiar:—

Food required to produce 1 lb. increase in live weight in fattening animals.

	Ox.	Sheep.
Linseed Cake	2.5	2.5 lb.
Clover Hay	6.0	3.0
Swedes	35.0	40.0

Pigs require about 5 lb. of barley meal to produce the same result.

These experiments, which were very extensive, and embraced a large number of animals, of which records were carefully kept, gave a distinct answer, from the point of view of the public, to the question under discussion; it was certain that grain would support very many more men than the meat it could be made to produce. He would present the results in another form.

As before, these figures (II : III) show the great difference between the grain or food necessary to produce the flesh. He would submit certain other figures relating to food products other than increase of weight. Another table presented a different point of view, showing results obtained in relation to food consumed.

(Tables II : III) *Results obtained with fattening animals per 100 lb. live weight per week :—*

	Received by Animal.		Results Produced.		
	Total dry food.	Digestible organic matter.	Food consumed for heat and work.	Dry manure produced.	Increase in live weight.
Oxen	12.5	8.9	6.86	4.56	1.13 lb.
Sheep	16.0	12.3	9.06	5.10	1.76
Pigs	27.0	22.0	12.58	4.51	6.43

Results obtained in relation to food consumed.

	Increase in Live Weight.		On 100 lb. of Dry Food.		
	Per 100 lb. dry food.	Per 100 lb. digested organic matter.	Consumed for heat and work.	Dry manure produced.	Dry increase yielded.
Oxen	9.0	12.7	54.9	36.5	6.2 lb.
Sheep	11.0	14.3	56.6	31.9	8.0
Pigs	23.8	29.2	46.6	16.7	17.6

Looking at the matter from the public point of view rather than that of the farmer—and the national aspect was the vital one—and having regard to the possibility of grain being excluded from import, it would be an advantage if the flesh-producing animals were non-existent. That observation, however, applied only to the immediate, and not to the future, prospect. The immediate prospect was the possibility, owing to the submarine menace, of the supply of grain being cut off; then the question of grain *versus* flesh becomes a pertinent one for national consideration.

Professor Wooldridge regarded the question on the agenda as somewhat wide. As he understood the question at the previous meeting, it was this :—"Is it more profitable for a farmer to use the grain he grows to feed stock than to sell it for human food.?" In effect, that question was merely a sub-section of the larger question on the agenda. The speaker's attitude was this, that it was not more profitable for the farmer to use his grain to feed stock, because he could sell that grain and purchase other foods less suitable for human consumption at a lower price, which could be utilised with equal advantage, in feeding stock. It was therefore more profitable to farmer to sell the grain he raised. For the working out of the matter, it was necessary to go into an analysis of the different foods and their digestibility; or, on another line to compare the actual food values of the different grains as food for cattle. He would take first the different food values, in the form of a food unit, of equal value to the cattle or animals consuming them and compare the cost, based upon what the farmer would get for his own grain or pay for incoming supplies (a method although perhaps not altogether free from objections.) The figures were calculated from to-day's prices as follows :—

Wheat	£16	16	0	per ton
Oats £2 5s. for 336 lb.	15	0	0	"
Maize	14	14	0	"
Dry Brewer's Grains	12	0	0	"

At that rate, the wheat which the farmer suggested using for his stock would, at present prices, cost him 3s. 2d. per food unit. Oats were worth 3s. per food unit, and maize 2s. 5½d. per food unit, while dry brewer's grains would cost 2s. 2d. per food unit. Obviously, therefore, it was very much cheaper for the farmer to sell his wheat and buy maize. But it was possible to go further. The comparison did not take into account the digestibility of the different foods. No two foods were digested or assimilated in equal proportions. Maize was digestible up to 80 per cent, wheat 74 per cent, and oats, in the case of cattle, up to between 60 per cent and 70 per cent. Therefore correcting the prices for digestibility, maize, having a higher proportion of digestibility than wheat, would be even cheaper.

The writer of the letter had stated that if he purchased cake it cost him 19s. a ton more than he was getting, at that time, for his wheat. Consequently, if he bought cake at £15 a ton (the price he quoted) the food unit would cost 2s. 4d., and the food unit for his wheat would amount to 3s. 2d. There again it was cheaper to buy his cake at the higher price per ton, because it was a more valuable food. Looking at the matter from another point of view: the amount of wheat which would be equivalent to that of maize was 1·080, so that more wheat than maize had to be used to get the same value. Wheat was £16 16s. per ton and maize £14 14s. a ton, the latter being cheaper on cost price alone; but supposing the prices were equal the maize would still be the cheaper of the two. But both maize and wheat, although good foods for cattle, were somewhat deficient in albuminoids. As had been pointed out in the letter, that deficiency could be made up by combining with them an admixture of highly albuminous food, such as cake, containing, as had been pointed out, as much as 40 per cent. of albuminoids, maize only contained 10 per cent. of albuminoids, and wheat only 12 per cent., so that the deficiency could easily be made up by the use of oil cake, which, again, was cheaper per food unit than the wheat. The farmer had, moreover, recommended as very effective for horses, a mixture of maize, grains and bran, in equal proportions. Of those foods bran was proportionately expensive. Only that day he had heard of broad bran sold at £16 a ton, and at that price the food unit cost would be 3s. 2d., or the same price as wheat, that was much too expensive for its worth, as it was not a highly nutritious food. What he would recommend the farmer to do in that case was to use a mixture of maize, dry grains, and cake. The farmer would then have a much cheaper mixture (whether for horses or cattle) per food unit than wheat alone, and one infinitely superior in food value. From the farmer's point of view, therefore, it would be more profitable to sell his wheat and buy these other foods. So much for the limited aspect of the question.

Turning to the question of whether it paid better to convert grain into beef or meat (another question, and a very big one), Mr. Almond had mentioned that the produce of the farms was worth ten times as much in the form of grain as in the form of meat—that was to say, for human consumption. The speaker would like to have had actual figures in support of the contention. Further, the other figures submitted by Mr. Almond to prove that, in this connection, it was cheaper to use grain than meat, were far from convincing. Mr. Almond had stated that to produce, in an ox, one pound increase in live weight would require 2·5 lb. of linseed cake, 6 lb. clover hay, and 35 lb. of swedes. The speaker did not dispute the figures of Laws and Gilbert, but desired to indicate how Mr. Almond might have proved his point more clearly had he shown how much those materials cost to produce and what was the value of the pound of beef, live weight. It would then have been possible to

form a clear conception as to whether or not it was cheaper to use those materials for cattle food in order to produce flesh for human consumption. The bald character of Mr. Almond's statement does not successfully prove the contention that it is more profitable to sell wheat than to use it as food for the production of meat; probably that was the case, and personally he (Prof. Wooldridge) had no doubt of it, but the statement, as made, did not conclusively prove the point. Further, Mr. Almond submitted that, in the case of the ox, 12½ lb. of dry food produced 1·13 lb. increase in live weight; there, again, it would have made matters clearer to have stated the cost of the 12½ lb. of dry food, together with the value of the 1·13 lb. of flesh. He would suggest that it was worth while to work out the statement in that form; it would then carry conviction. If Mr. Almond limited himself solely to the cost of grain and the value of flesh, the speaker considered the point was proved.

But another point of great importance was frequently lost sight of, although the President had casually mentioned it; he referred to manurial values. When the corresponding value was limited to flesh, that left out of account the manurial value, so important in increasing the growth of grain and of producing grain of a different order. Farmers were not philanthropists, and did not use corn to produce beef to make a present of it to the human race. From the public point of view it was necessary that more grain should be raised, and for this manure was required. Manures had, therefore, to be produced in the manner indicated, or artificial manures had to be resorted to; artificial manures, although cheaper, were not so good, and, made use of wholly, would not produce the grain hoped for, whereas judicious combination was more likely to achieve the result. He contended that if the farmer produced beef he did so because it paid him, and that was a complete answer from the farmer's point of view; and it was that point of view to which Mr. Livesey's question related—not the point of view of public consumption. The speaker was of opinion that it would pay a farmer to raise and feed stock, but not upon the grain which the farmer had himself grown.

From the public point of view, the matter had a different aspect. Prof. Wooldridge believed that the day would come when the question would be regarded from an entirely economic standpoint. Before long we should probably be condemned to two or three meatless days a week, solely that more grain might be used for human food, and to reduce the number of men employed to produce flesh for human consumption. From the somewhat myopic point of view of two or three years, this course would pay, but from the standpoint of a more extended future it would prove unprofitable to use all the grain for human consumption, and restrict it for flesh production or stock-raising. He considered, however, that he had shown by figures that it would pay a farmer to sell his wheat and buy, at a less cost, other grain, which would yield higher feeding values for the production of beef.

He further desired to refer to the figures given by Mr. Almond in relation to pig-raising. These figures had shown clearly, and it was a well-known fact, that a better return in flesh for food consumed was obtained from pigs than from any of the other animals. In spite of that, he was given to understand that litters of young pigs were now actually being drowned as they were born, on account of the difficulty of obtaining suitable pig foods. Matters would be serious in the pig world if the practice were continued.

Mention, too, had been made of the fact that cows had been given up. That might be so. He did not know what the figures for the milch cow population in the country were at the present time, but he had recently seen it definitely stated that the actual population of stock was higher in this country than it had been for years. Even, therefore, if milch cows were being reduced, other stocks were taking their place. It would, at all events, have been interesting to have had the census of milch cows, in order to check the statement that cows were being given up. He believed that in some localities they were, in others not, and it was possible that a balance existed. He thought that farmers were justified in asking the price they did for milk; the maximum now being fixed erred, if at all, on the low side, so far as the actual cost of production was concerned. The price was even more reasonable when it was borne in mind that its present winter price 6d. per quart was only about 20 per cent beyond its original ante-war cost in London during the winter—namely 5d. a quart This compares very favourably indeed with the 100 per cent advance in beef; yet no one contended that butchers were making an extra profit out of the advance; it was known that they were not. Indeed many butchers were actually losing money, and only keeping their trade together for better times. It was difficult to see why therefore, the farmer and the milkseller should be singled out for imprecation.

At this point, there being no other members present who were desirous of speaking, the proceedings terminated with the announcement by the President, in conformity with the feeling of the meeting, that the discussion would be adjourned to the next general meeting.

HUGH A. MACCORMACK, Hon. Secretary.

ARMY VETERINARY SERVICE.

Extracts from *London Gazette*,

WAR OFFICE, WHITEHALL, Dec. 16.

REGULAR FORCES. ARMY VETERINARY CORPS.

Temp. Lts. to be temp. Capts.:—G. M. Yardley (Nov. 5); C. J. Clifford (Nov. 17); G. H. Barber (Nov. 24); R. W. Glaister, W. B. Towell, R. P. Holmes, C. W. Perrin, F. T. Smyth (Dec. 6).

The following casualties are reported:—

DIED—L.-Cpl. J. Hennah, 10236 (Wood Green, N.)
Pte. F. Lanyon, 20297 (Scorrier).
Pte. J. Brennan, SE/1980 (Bannockburn).
Pte. W. Freer, SE/1891 (Feltham).

Personal.

Second-Lieut. J. MARK, Royal Irish Regiment, elder son of Mr. James Mark, M.R.C.V.S., Newry, is reported slightly wounded.

At the first meeting of the Chemical Society for this session a number of specimens of British-made synthetic chemicals were shown. They included chloralamide, chloramine-T, acetanilide, aspirin, paraldehyde, salol, adalin, (bromdiethyl-acetylurea), phenacetin' hexamine, antipyrine, phthalic anhydride, and digitalin, all of them drugs made in Germany before the war. It is stated that these drugs are being manufactured in factories specially erected for the purpose at Nottingham since the outbreak of war.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.	Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡		Sheep Scab.	Swine Fever.	
	Out-breaks (a)	Animals.	Out-breaks (a)	Animals.	Out-breaks (b)	Animals.	Out-breaks (b)	Animals.	(b)	Out-breaks (a)	Slaughtered. *
GT. BRITAIN. Week ended Dec. 16	14	19				2	43	102	27	75	36
Corresponding week in 1915 ...	10	10			1	1	40	105	22	61	225
Corresponding week in 1914 ...	18	20	3	42	1	5			15	77	361
Corresponding week in 1913 ...	15	15	1	50	5	9	47	79	26	59	1127
Total for 51 weeks, 1916	537	641	1	24	47	117	2070	4519	345	4259	9119
Corresponding period in 1915 ...	566	632	56	702	49	85	‡879	‡1903	238	3913	16454
Corresponding period in 1914 ...	710	775	27	166	97	286	1530	2642	218	4298	39C78
Corresponding period in 1913 ...	575	629	2	73	155	398	2334	4558	223	2520	31687

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive.

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked :—London 2

Board of Agriculture and Fisheries, Dec. 19, 1916 Excluding outbreaks in army horses.

IRELAND. Week ended Dec. 16	...	...	...	...	...	...	Outbreaks ...	28	5	30
Corresponding Week in 1915 ...	...	...	...	...	...	...	2	11	1	2
Corresponding Week in 1914 ...	...	...	...	...	...	...	...	11	2	15
Corresponding Week in 1913 ...	...	...	...	...			1	24	1	17
Total for 51 weeks, 1916 ...	3	7	...	...	...	...	61	482	309	1846
Corresponding period in 1915 ...	2	2	...	...	1	3	70	409	244	1351
Corresponding period in 1914 ...	1	1	76	957	...	...	76	478	192	966
Corresponding period in 1913 ...	...	...	...	...	1	1	113	535	133	893

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Dec. 18, 1916

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection

OBITUARY

WALTER BURT, M.R.C.V.S., Brighton.
Graduated, Lond: May, 1857.

Mr. Burt deceased on Wednesday, at 18 Lancaster Road, Brighton, at the age of 80 years.

JAMES FERGUSON SIMPSON, J.P., F.R.C.V.S., Maidenhead, Berks. Graduated, Lond: April, 1866.
Fellow, June, 1885.

Mr. J. F. Simpson was President R.C.V.S., 1895-96; served as Member of Council from 1888 to 1912, and as Vice-President, 1885-6-7-8, 93-4, 6-7.

By the death of Mr. J. F. Simpson, J.P., F.R.C.V.S., Maidenhead has lost another of its oldest and most highly-esteemed residents. For a very considerable time Mr. Simpson, had been laid aside and unable to participate in those activities in which he interested himself—particularly horticulture—after his retirement from professional practice. His end, however, came quite unexpectedly on Thursday last, when he passed peacefully away, in his 71st year.

Mr. Simpson was a member of Council of the Royal Counties' Veterinary Medical Association, and was President in 1886. He entertained the members of the association on three occasions; the last in June 1895.

Mr. Simpson was for many years a member of the Maidenhead Town Council, and filled the office of Mayor of the town for the year 1891-2, and his energy and generous hospitality during his mayoralty is remembered to this day. He was senior magistrate for the borough, having been appointed on 7th March, 1881, and he was also a Justice of the Peace for the County (Maidenhead division), and was a regular attendant on the Bench of each. There were many local institutions with which Mr. Simpson was officially connected. He was an ex-chairman of the Northern Divisional Committee of the East Berks Conservative and Unionist Association, and a leading member of the Association proper; was one of the founders, and up to his illness Hon. Treasurer of the Maidenhead Constitutional Club; a founder and Hon. Treasurer of the Maidenhead Conservative Working Men's Club, a trustee of Lady Bocock's and Seymour's Charities, a member of the Council and an official of the East Berks Horse Show Society, and also of the committee of the Royal East Berks Agricultural Association, and a member of the Maidenhsad Committee for dealing with Old Age Pensions. He was a director of the Berks and Bucks Permanent Benefit Building Society, and deputy-chairman of the Maidenhead Gas Company for a number of years. He was a Past Master of the "Ellington" Lodge, (Maidenhead) of Freemasons, and was a Past Officer of the Province.

Mr. Simpson was also a member of the Berks County County Council, being one of the Maidenhead representatives from the formation of the Council up to the time of his illness. He attended the meetfngs regularly, and rendered valuable service on some of its most important committees.

His son, Major P. J. Simpson, F.R.C.V.S., is in Egpyt serving with the Army Veterinary Corps.

The funeral took place on Monday afternoon, from "Strathmore," High Street, the residence of Major and Mrs. P. J. Simpson. The mourners were: Mrs. Percy Simpson (daughter-in-law); Miss Shackel (niece); Miss Budgen, Mr. F. J. C. Forss, Mr. G. P. Male, F.R.C.V.S., Reading; Mr. W. Western, M.R.C.V.S. Bracknell.

Many wreaths and other floral tokens of affection and sympathy were sent, among them from the President, Council and Officers of the Royal College of Veterinary Surgeons; the President and Members of the Royal Counties' Veterinary Medical Association.

Amongst those who wrote regretting their inability to attend the funeral, owing to indisposition and other causes, were:—The President of the Royal Veterinary College, Mr. F. Bullock (Secretary and Registrar of the Royal College of Veterinary Surgeons), and Mr. W. J. Mulvey, F.R.C.V.S.—*Maidenhead Advertiser.*

Vaccination for Epizootic Bovine Abortion.

The following is the text of a preliminary memo. issued by the Board of Agriculture to Veterinary Surgeons who apply for such information. It is here commended to the notice of *all* Veterinary Surgeons, since the opportunity frequently occurs to advise the procedure, which has been fully proved in several parts of the country.

There are two methods of dealing with epizootic abortion once the disease exists in a herd, (*a*) by picking out and isolating the healthy; and (*b*) by vaccinating all the cows and heifers before they become pregnant.*

In the first-mentioned method blood is taken from each of the prognant animals and examined by the agglutination test. All negative reactors, that is to say, the presumably healthy cows, are removed to clean buildings, and separate attendants are provided. This method is only applicable if an owner is in a position to provide the necessary arrangements for complete isolation, and the proportion of initial infection is not too high. If both these conditions do not obtain the method cannot be considered, nor is it likely to give good results if the disease has been in existence for some months.

The second method—vaccination—aims at artificially rendering the animals sufficiently resistant to the disease to enable them to carry their calves to full time, notwithstanding the presence of natural infection in their surroundings.

If left unvaccinated in the midst of infection the various members of an infected herd as a rule gradually become resistant, and abortion is then confined almost entirely to heifers and other new animals brought in. Before this occurs, however, very considerable losses in calves and milk are usually experienced.

Vaccination also aims at reducing these losses by rendering the animals resistant before they become pregnant, and by establishing a high degree of resistance in the herd in a shorter time than that required for the natural process to operate.

The vaccine—Anti-abortion A— is composed of exceptionally rich cultures of living bacilli, obtained by cultivating them in a particular way. The immunising dose is a large one (50 c.c).

This *Vaccine* should not be referred to as "*Serum*," as this, apart from being incorrect, causes misunderstanding on the part of stock-owners, who may afterwards object that they did not want to introduce a living vaccine into their animals. There is no serum which is of any use against abortion. Vaccines consisting of dead bacilli are sometimes advertised for sale as preventive and curative remedies for abortion. Such vaccines were first tried by the Board on some hundreds of animals. under the name of "Anti-abortion B," and this method of injecting dead bacilli, besides being troublesome and expensive owing to the repeated injections, was found to be useless both for curative and preventive purposes. Results can only be expected from the use of living vaccines, and it is advisable to ask for an assurance that the vaccine, if it be purchased, consists of living bacilli, unless it is specially stated to be so.

Before resorting to vaccination the objects and requirements of the method should be fully explained to the stock-owner, so that he may be sure its adoption will suit his business. The following may be noted:—

1 Animals already pregnant must not be inoculated, otherwise they may abort.

2 There is no curative or preventive treatment for pregnant animals.

3 After a non-pregnant animal has been vaccinated, it should not be served until a period of two months has elapsed. This period is to allow time for resistance to establish itself, and for the active bacilli to be got rid of from the system.

4 Full time calvers in infected herds may be vaccinated as soon as they have cleansed, and recovered from the calving.

5 If the injection is carefully carried out there should be nothing more than a small and temporary local swelling at the site of inoculation. There may be a slight drop in the amount of milk for a few days.

6 Anti-abortion A is issued from the Board's laboratory. It is issued free of charge, except for transit expenses, on the application of farmers through a veterinary surgeon. A short form of application has to be filled in by the owner of a herd, giving its history in relation to abortion.

7 Farmers who avail themselves of the material are expected to supply simple records of the results on designed forms, which will be sent to the veterinary surgeon along with the vaccine.

8 A special memo. on the technique of the operations, which should be strictly adhered to, is available for veterinary surgeons whose clients desire the treatment. A small amount of simple apparatus is required, and a veterinary surgeon applying for material should, in order to avoid delay and correspondence, say whether he has the apparatus, or when he expects to have it.

9 "*Turning to the bull*" is very troublesome on a number of farms. A small proportion of cows which have aborted may remain sterile owing to lesions resulting from the abortion disease. "*Turning*," however, when it prevails on a farm, appears to be a different disease altogether. Sometimes it prevails at the same time as abortion; in other cases "*turning*' is prevalent where abortion does not exist. Information as to the existence of "*turning*" on premises for which vaccine is desired should be given by the veterinary surgeon.

It is not necessary or convenient in a short memo. like the above to go fully into the subject of abortion, its diagnosis, prevention, etc. Veterinary Surgeons who desire information on the subject are referred to the following articles published in English:

[It is not suggested that these articles constitute anything like the available literature, but they are readily available, and constitute a basis for correspondence should further information be desired.]

Report of the Committee on Epizootic Abortion, Part 1 (Cd. 4742), and the appendix to Part 1 (Cd. 4863).

Annual Report of the Chief Veterinary Officer of the Board of Agriculture and Fisheries for the year 1914, (Cd. 8043).

(Either of the above may be obtained directly or h rough any bookseller from Messrs. Wyman and Sons, 29 Breams' Buildings, Fetter Lane, London, E.C.).

* It is always inadvisable to vaccinate a clean herd.

Epizootic Abortion Leaflet, (free on application to the Secretary, Board of Agriculture and Fisheries, 4 Whitehall Place, London, S.W.

The Journal of Comparative Pathology and Therapeutics, Vols. XXV., p. 22, 1912, and XXVI. p. 142, 1913.

SOUTHERN COUNTIES VETERINARY SOCIETY.

(NATIONAL V.M.A.—SOUTHERN BRANCH).

At the request of a number of the members a general meeting was convened for Thursday December 7th at the Royal College of Veterinary Surgeons, Red Lion Square, W.C. The President Mr. G. H. Livesey of Hove took the chair, and the others who signed the attendance book were Professor G. H. Wooldridge, London, and Messrs Jas. T. Angwin, Arundel, hon. Secretary, H. A. MacCormack, London, and F. G. Samson, Mitcham, together with Mr. G. S. Heatley a visitor.

On the proposition of Mr. Samson, seconded by Mr. MacCormack the minutes of the last meeting as published in *The Veterinary Record* were taken as read and confirmed.

The HON. SECRETARY reported that he had received apologies at inability to attend from Messrs. W. A. Collins, Tenterden, W A. Dellagana, Southampton, C. Pack, Lymington, C. Peirce, Maida Hill, C. Roberts, Tunbridge Wells, C. H. Spurgeon, Petworth, S. H. Slocock, Hounslow, and A. C. Wild, Woking.

THE PRESIDENT asked if it was proposed to do anything that day with reference to making a donation to the Anglo-Franco-Belgian Relief Fund. At the June meeting it was decided that this should be brought up again that day, although there was a general opinion that it would be plenty of time next year.

Mr. Samson proposed that the matter be again adjourned, Mr. Angwin seconded, and this was agreed to.

In connection with the correspondence the President asked if anything further had been heard of the Society's set of instruments.

The HON SECRETARY replied in the negative. He had written to several members asking them if they could help him in the matter, but had received no replies, and he was afraid they must accept the fact that they had lost all trace of them, for the time being at any rate.

The selection of a place for the next meeting was the next item on the agenda, but the President remarked that this would not require any resolution unless they were thinking of meeting again before the annual meeting in March, as it was a recognised thing, he believed, for the annual meeting to be held in London at the end of that month.

Mr. ANGWIN raised the question of holding their meetings as usual during the war. At the last annual meeting it was stated that the disbursements for the previous year had come to about £18 and he saw that the President on that occasion himself ask whether it was worth while holding so many meetings as four a year in view of the small attendance they got at them.

The PRESIDENT: And I believe it was decided then that we should continue to hold them as usual. It is necessary of course that the Society should be kept alive and carried on, but it is for the members to decide, how frequently we shall meet. Mr. Livesey also pointed out that they had dropped the September meeting this year.

Mr. SAMSON asked if the Hon. Secretary could tell them how their finances stood.

Mr. ANGWIN: I cannot tell you that, but according to the minutes of the last annual meeting, we then had about £27 in hand, although I gather there were one or two payments to be met out of that.

Mr. SAMSON: If we have that in hand I don't see why we should not continue to hold our meetings as usual.

The PRESIDENT: We are bound to hold our next meeting in any case, and we shall then no doubt get a clear statement from our Hon. Treasurer of how we stand financially.

Mr. MACCORMACK proposed that a notice be placed on the agenda for the Annual Meeting to consider the question of continuing to hold the regular meetings of the Society during the war: and this was agreed to.

SPECIMENS AND CASES.

Mr. ANGWIN would like to ask the President one or two questions about a case he had recently. A cat was brought to him on a Friday, and the gentleman who brought it said he thought the animal had been poisoned. The cat was making continued efforts to vomit, but after examining it he came to the conclusion that it was not poisoned, but had got something stuck in its throat. He used the probang two or three times and found there was nothing stopping the œsophagus.

Until the following Tuesday the cat never ate or drank anything at all, but on the Tuesday it drank a little milk, and on the Wednesday it took a little meal. Since then it has passed a needle and thread, and was now practically all right except that it had a very severe yellow diarrhœa. There was no hæmorrhage, and, as he said, the cat was apparently all right again, but he had not yet succeeded in stopping the diarrhœa.

In reply to Mr. Samson, Mr. Angwin said, that the appetite was pretty good, and that the needle was quite intact and the piece of thread too.

In reply to the President, the diarrhœa commenced three days after the cat had passed the needle.

The PRESIDENT thought the needle had nothing to do with the diarrhœa, but that it was probably due to its having been on short commons and then taking a lot of rich food again. At the same time Mr. Angwin was very lucky to have got rid of the needle in the way he did.

Mr. ANGWIN had another somewhat similar case, but in this the cat had got a small bone lodged in its throat. He got a pair of forceps, but immediately he got them on to the bone it broke off. He kept the cat four days without its getting any better, and as it was then in a very weak state he tried the forceps again and withdrew the bone. The cat then got all right immediately, and the day after he sent it home.

Under the heading of general business, Mr. Angwin mentioned that there was just a possibility that their Hon. Secretary would be called up. He appealed before the Arundel Tribunal and was granted two months on condition that he joined the Volunteers. He informed the Chairman that he could not do so owing to the nature and extent of his business, but he was told he must find the time. Anyway he joined, and immediately after that the Military lodged an appeal. He had put his case in the hands of the Farmers' Union, of which he had been a member ever since a branch was formed in West Sussex, and they were now taking his case up. He might add, that when his case came before the local Tribunal, he drew attention to the instructions Lord Selborne had issued for the guidance of Tribunals when dealing with the cases of veterinary surgeons whose services were necessary from the point of view of agriculture, but apparently no notice was taken of that.

The PRESIDENT thought that as Mr. Angwin also held a position on the local Town Council, the idea in transferring the case to the County Tribunal was that it would be a more impartial body; and he suggested that he would probably find he would get better treatment there especially if he was supported by the Farmers' Union as being essential from the agricultural point of view.

JAS. T. ANGWIN, Hon. Sec.